

SEQUENCE LISTING

<110> Rasmussen, Michael Dolberg
 <120> Method For Increasing Gene Copy Number
 <130> 10028.204-US
 <160> 12
 <170> PatentIn version 3.1
 <210> 1
 <211> 6405
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> Synthetic

<400> 1
 ctaaatcggt agaagcccaa acgttccacg atgcgatttg tgcccttata gtagaagagc 60
 tgtttgaata tgcaggcaaa tggcgtaata ttcgtgtgca aggaccgaca acattttctac 120
 catccttgac tgtacaggta gcaatggcag gtgccatgtt gattgggtctg catcatcgca 180
 tctgttatac gacgagcgct tcggtcttaa ctgaagcagt taagcaatca gatcttcctt 240
 caggttatga ccatctgtgc cagttcgtaa tgtctgggtca actttccgac tctgagaaac 300
 ttctggaatc gctagagaat ttctggaatg ggattcagga gtggacagaa cgacacggat 360
 atatagtgga tgtgtcaaaa cgcataccat tttgaacgat gacctctaata aattgttaata 420
 catgttggag ctcaagtgaga gcgaagcgaa cacttgattt ttttaattttc tatcttttat 480
 aggtcattag agtatactta tttgtcctat aaactattta gcagcataat agattttattg 540
 aataggtcat ttaagttgag catattagag gaggaaaatc ttggagaaat atttgaagaa 600
 cccgagaatg gaggccttct caattgagaa ggcctttttt aaagaacaag ggtgcctaaa 660
 caggcaccct tgtagctgt tatttgattt tcacaataac atcattactg aatttttagtt 720
 tccaagtgcc ttttgcataa gcttccttgt caacttcaaa tgcttttaca cctgttactt 780
 taatattagg atttagatca ctcaaaattt tagagttatc aacttttgtc tcagttgcat 840
 agtttacaga agcatcaata tcagaatcat aagaagtacc atcagcatca actaatttaa 900
 cagttggaat tgaaaaagag ctaatcggtt ttttagatac gtttttaatt gtatattgaa 960
 cagctacaat tgtacctcag cggcgcagcg ggtcgacgcg gccgcaacca tttgatcaaa 1020
 gcttgcatgc ctgcaggtcg attcacaaaa aataggcaca cgaaaaacaa gttaagggat 1080
 gcagtttatg catcccttaa cttacttatt aaataattta tagctattga aaagagataa 1140

gatgagttac agaaggcaaa taagcagtta cagagtggaa tagagcatat gaggtctacg	2940
aaaccctttg attatgaaaa tgagcgtaca ggtttgttct ctggacgtga agagactggt	3000
agaaagatat taactgctga tgaatttgaa cgcctgcaag aaacaatctc ttctgcagaa	3060
cggattgttg atgattacga aaatattaag agcacagact attacacaga aaatcaagaa	3120
ttaaaaaaac gtagagagag tttgaaagaa gtagtgaata catggaaaga ggggtatcac	3180
gaaaaaagta aagaggttaa taaattaaag cgagagaatg atagtttgaa tgagcagttg	3240
aatgtatcag agaaatttca agctagtaca gtgactttat atcgtgctgc gagggcgaat	3300
ttccctgggt ttgagaaaagg gtttaatagg cttaaagaga aattctttaa tgattccaaa	3360
tttgagcgtg tgggacagtt tatggatggt gtacaggata atgtccagaa ggtcgataga	3420
aagcgtgaga aacagcgtac agacgattta gagatgtaga ggtactttta tgccgagaaa	3480
actttttgcg tgtgacagtc cttaaaatat acttagagcg taagcgaaaag tagtagcgac	3540
agctattaac tttcggtttc aaagctctag gatttttaat ggacgcagcg catcacacgc	3600
aaaaaggaaa ttggaataaa tgcgaaaatt gagatgttaa ttaaagacct ttttgaggtc	3660
tttttttctt agatttttg ggttatntag gggagaaaac ataggggggt actacgacct	3720
ccccctagg tgtccattgt ccattgtcca aacaaataaa taaatattgg gtttttaatg	3780
ttaaaagggt gtttttatatg ttaaagtga aaaaacagat gttgggaggt acagtgatgg	3840
ttgtagatag aaaagaagag aaaaaagttg ctgttacttt aagacttaca acagaagaaa	3900
atgagatatt aaatagaatc aaagaaaaat ataattatag caaatcagat gcaaccggta	3960
ttctaataaa aaaatatgca aaggaggaat acggtgcatt ttaaacaaaa aaagatagac	4020
agcactggca tgctgcctat ctatgactaa attttgtaa gtgtattagc accgttatta	4080
tatcatgagc gaaaatgtaa taaaagaaac tgaaaacaag aaaaattcaa gaggacgtaa	4140
ttggacattt gttttatatc cagaatcagc aaaagccgag tggtagagt atttaaaaga	4200
gttacacatt caatttgtag tgtctccatt acatgatagg gatactgata cagaaggtag	4260
gatgaaaaaa gagcattatc atattctagt gatgtatgag ggtaataaat cttatgaaca	4320
gataaaaaata attacagaag aattgaatgc gactattccg cagattgcag gaagtgtgaa	4380
aggtcttggt agatatatgc ttcacatgga cgatcctaataaatttaaat atcaaaaaga	4440
agatatgata gtttatggcg gtgtagatgt tgatgaatta ttaaagaaaa caacaacaga	4500
tagatataaa ttaattaaag aaatgattga gtttattgat gaacaaggaa tcgtagaatt	4560
taagagttta atggattatg caatgaagtt taaatttgat gattggttcc cgcttttatg	4620

cgatttatga ttcaggtgga tacttagaga aagtgtatca aactg 6405

<210> 2
 <211> 5943
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 2
 gatccatctg aaggtcgata cggggatgaa cagacttgggt gtaaaaacag aggaagaagt 60
 tcagaacgtg atggcaattc ttgaccgcaa ccctcgttta aagtgcaaag gggatatttac 120
 ccatttttgcg acagcggatg aaaaagaaaag aggctatttc ttaatgcagt ttgagcgctt 180
 taaagagctg attgctccgc tgccgttaaa gaatctaata gtccactgcg cgaacagcgc 240
 cgctggactc cggtgaaaa aaggcttttt taatgcagtc agattcggca tcggcatgta 300
 tggccttgcg cgtctgctg acatgtcgga cgagataccg tttcagctgc gtccggcatt 360
 taccctgcat tcgacactgt cacatgtcaa actgatcaga aaaggcgaga gcgtcagcta 420
 cggagccgag tacacagcgg aaaaagacac atggatcggg acggtgcctg taggctatgc 480
 ggacggctgg ctccgaaaat tgaaagggac cgacatcctt gtgaagggaa aacgcctgaa 540
 aattgccggc cgaatttgca tggaccaatt tatggtggag ctggatcagg aatatccgcc 600
 gggcacaaaa gtcacattaa taggccggca gggggatgaa tatatttcca tggatgagat 660
 tgcaggaagg ctcgaaacca ttaactatga ggtggcctgt acaataagtt cccgtgttcc 720
 ccgtatgttt ttggaaaatg ggagtataat ggaagtaaga aatcctttat tgcaggtaaa 780
 tataagcaat taacttacct aaatggagaa ttcataaaac agctttgcgt cgacgatgaa 840
 gatggatttt ctattattgc aatgtggaat tgggaacgga aaaattattt tattaaagag 900
 tagttcaaca aacgggccag tttgttgaag attagatgct ataattgtta ttaaaaggat 960
 tgaaggatgc ttaggaagac gagttattaa tagctgaata agaacggtgc tctccaaata 1020
 ttcttattta gaaaagcaaa tctaaaatta tctgaaaagg gaatgagaat agtgaatgga 1080
 ccaataataa tgactagaga agaaagaatg aagattgttc atgaaattaa ggaacgaata 1140
 ttggataaat atggggatga tgtaaggct attggtgttt atggctctct tggctcgtcag 1200
 actgatgggc cctattcgga tattgagatg atgtgtgtca tgtcaacaga ggaagcagag 1260
 ttcagccatg aatggacaac cggtgagtgg aaggtggaag tgaattttga tagcgaagag 1320
 attctactag attatgcac tcaggtggaa tcagattggc cgcttacaca tgggtcaattt 1380

ttctctat	ttt	tgccgatt	ta	tgattcag	gt	ggatact	ta	agaaagt	gt	tcaaact	gct	1440
aaatcg	gt	tag	aagcccaa	aac	gttccac	gat	gcgatt	ttgt	g	cccttat	cg	1500
tttgaat	at	g	caggcaa	at	g	gcgtaat	att	cgtgtg	caag	gaccgac	aac	1560
tccttg	act	g	tacagg	tag	c	aatggc	ag	gt	gccatg	ttga	ttggtct	1620
tg	tata	cga	cgagcg	cttc	ggtctt	aa	act	gaagc	ag	tta	agcaat	1680
gg	tat	gacc	atctgt	gcc	a	gttcg	ta	at	tctg	gtca	tttccg	1740
ct	gga	atcg	c	tagaga	at	tt	ctgga	at	ggg	attcag	gag	1800
a	tag	tg	gat	g	tgtcaaaa	c	g	atacc	at	tt	tgaac	1860
tg	ttg	gt	tac	gtatt	tatta	acttct	ccta	gtatt	ag	taa	ttatcat	1920
c	atta	ac	gga	ataa	aggg	tg	ctttaa	atc	ggg	ccatt	tt	1980
a	att	at	gag	c	gaatt	ga	att	aata	aa	gg	taata	2040
a	ttt	tg	cg	gc	cgcca	ac	ctc	gag	at	ctct	tt	2100
a	tag	g	g	g	g	g	g	g	g	g	g	2160
t	aa	at	tt	g	gtttt	ta	at	g	tt	ta	aa	2220
g	tt	g	g	g	g	g	g	g	g	g	g	2280
a	ag	ac	tt	ta	ca	ga	ga	aaa	at	gag	at	2340
t	t	cag	ca	at	c	gggc	gc	gatt	gctga	ata	aaa	2400
t	at	tt	tg	ag	t	gg	ttt	gt	cc	gttac	act	2460
t	g	ct	gag	t	ct	gg	ctt	tc	ggt	tt	cg	2520
t	aa	ag	gt	gga	gat	ttt	tt	ga	gtgat	ctt	ct	2580
t	ta	ac	gag	c	ac	ga	gag	caa	a	accccc	ctt	2640
t	tt	ct	ttt	ttt	ttt	ttt	ttt	ttt	ttt	ttt	ttt	2700
g	cc	gac	ag	cc	tc	gag	ag	ca	cac	act	ttat	2760
t	t	gga	ag	tg	tgcc	g	aaa	gag	aa	at	gcctc	2820
g	at	tt	ac	ata	tgag	ttat	gc	ag	ttt	gtaga	atgca	2880
g	gc	ag	ag	ctc	ggt	accc	ggg	ag	ct	ctat	ca	2940
g	a	ga	ag	cag	ag	agg	ct	att	ga	ata	atga	3000
g	ga	ag	aaa	at	atag	gg	aaa	a	tg	tact	ttgt	3060
a	t	gt	tac	aca	ttgaa	agggg	agg	aga	at	ca	tga	3120

ggttacattg gcagccacac atgtgttgaa ctattgaaca gcggctacga gattgttggt 4920
 cttgataatc tgtccaacag ttcagctgaa gcgctgaacc gtgtcaagga gattacagga 4980
 aaagatttaa cgttctacga agcggattta ttggaccggg aagcggtaga ttccgttttt 5040
 gctgaaaatg aaatcgaagc tgtgattcat tttgcagggt taaaagcagt cggcgaatct 5100
 gtggcgattc ccctcaaata ttatcataac aatttgacag gaacgtttat tttatgcgag 5160
 gccatggaga aatacggcgt caagaaaatc gtattcagtt catctgcgac agtatacggc 5220
 gttccggaaa catcgccgat tacggaagac tttccattag gcgcgacaaa tccttatggg 5280
 cagacgaagc tcatgcttga acaaatattg cgtgatttgc atacagccga caatgagtgg 5340
 agcgttgcg cgttctgta cttaacccg ttcggcgcgc atccaagcgg acggatcgg 5400
 gaagacccga acggaatccc aaataacctt atgccgtatg tggcacagggt agcagtcggg 5460
 aagctcgagc aattaagcgt attcggaaat gactatccga caaaagacgg gacaggcgta 5520
 cgcgattata ttcacgtcgt tgatctcgca gaaggccacg tcaaggcgct ggaaaaagta 5580
 ttgaactcta caggagccga tgcatacaac cttggaacag gcacaggcta cagcgtgctg 5640
 gaaatgggtca aagcctttga aaaagtgtca gggaaagagg ttccataccg ttttgcggac 5700
 cgccgtccgg gagacatcgc cacatgcttt gcagatcctg cgaaagccaa gcgagaacta 5760
 ggctgggaag cgaaacgcgg ccttgaggaa atgtgtgctg attcctggag atggcagtct 5820
 tctaattgtga atgggtataa gagtgcggaa taagaatgga ggccttctca attgagaagg 5880
 ctttttttaa agaacaaggg tgcctaaaca ggcacccttg ttagctgtta tttgattttc 5940
 acg 5943

<210> 3
 <211> 5793
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Synthetic

<400> 3
 gatccatctg aaggtcgata cggggatgaa cagacttggt gtaaaaacag aggaagaagt 60
 tcagaacgtg atggcaattc ttgaccgcaa ccctcgttta aagtgcaaag gggatatttac 120
 ccattttgcg acagcggatg aaaaagaaag aggctatttc ttaatgcagt ttgagcgctt 180
 taaagagctg attgctccgc tgccgttaaa gaatctaag gtccactgcg cgaacagcgc 240
 cgctggactc cggctgaaaa aaggcttttt taatgcagtc agattcggca tcggcatgta 300

tggccttcgc	ccgtctgctg	acatgtcgga	cgagataccg	tttcagctgc	gtccggcatt	360
taccctgcat	tcgacactgt	cacatgtcaa	actgatcaga	aaaggcgaga	gcgtcagcta	420
cggagccgag	tacacagcgg	aaaaagacac	atggatcggg	acggtgcctg	taggctatgc	480
ggacggctgg	ctccgaaaat	tgaaagggac	cgacatcctt	gtgaagggaa	aacgcctgaa	540
aattgccggc	cgaatttgca	tggaccaatt	tatggtggag	ctggatcagg	aatatccgcc	600
gggcacaaaa	gtcacattaa	taggcocgga	gggggatgaa	tatatattcca	tggatgagat	660
tgcaggaag	ctcgaaacca	ttaactatga	ggtggcctgt	acaataagtt	cccgtgttcc	720
ccgtatgttt	ttggaaaatg	ggagtataat	ggaagtaaga	aatcctttat	tgcaggtaaa	780
tataagcaat	taacttacct	aatggagaa	ttcataaaac	agctttgcgt	cgacgatgaa	840
gatggatttt	ctattattgc	aatgtggaat	tgggaacgga	aaaattattt	tattaaagag	900
tagttcaaca	aacgggccag	ttgttggaag	attagatgct	ataattgtta	ttaaaaggat	960
tgaaggatgc	ttaggaagac	gagttattaa	tagctgaata	agaacgggtgc	tctccaaata	1020
ttcttattta	gaaaagcaaa	tctaaaatta	tctgaaaagg	gaatgagaat	agtgaatgga	1080
ccaataataa	tgactagaga	agaaagaatg	aagattgttc	atgaaattaa	ggaacgaata	1140
ttggataaat	atggggatga	tgttaaggct	attggtgttt	atggctctct	tggtcgtcag	1200
actgatgggc	cctattcgga	tattgagatg	atgtgtgtca	tgtcaacaga	ggaagcagag	1260
ttcagccatg	aatggacaac	cggtgagtg	aagggtggaag	tgaattttga	tagcgaagag	1320
attctactag	attatgcac	tcagggtgaa	tcagattggc	cgcttacaca	tggatcaattt	1380
ttctctattt	tgccgattta	tgattcagg	ggatacttag	agaaagtgt	tcaaactgct	1440
aaatcggtag	aagcccaaac	gttcacgat	gcgatttgtg	cccttatcgt	agaagagctg	1500
tttgaatatg	caggcaaatg	gcgtaatat	cgtgtgcaag	gaccgacaac	atttctacca	1560
tccttgactg	tacaggtagc	aatggcagg	gccatgttga	ttggtctgca	tcacgcac	1620
tgttatacga	cgagcgcttc	ggtcttaact	gaagcagtta	agcaatcaga	tcttccttca	1680
ggttatgacc	atctgtgcca	gttcgtaatg	tctggtcaac	ttccgactc	tgagaaactt	1740
ctggaatcgc	tagagaattt	ctggaatgg	attcaggagt	ggacagaacg	acacggatat	1800
atagtggatg	tgtcaaaacg	cataccattt	tgaacgatga	cctctaataa	ttgttaatca	1860
tgttggttac	gtatttatta	acttctccta	gtattagtaa	ttatcatggc	tgtcatggcg	1920
cattaacgga	ataaaggggtg	tgcttaaatc	gggccatttt	cgctaataag	aaaaaggatt	1980
aattatgagc	gaattgaatt	aataataagg	taatagattt	acattagaaa	atgaaagggg	2040

gggaaagagg ttccataccg ttttgcggaac cgccgtccgg gagacatcgc cacatgcttt 5580
gcagatcctg cgaaagccaa gcgagaacta ggctgggaag cgaaacgcgg ccttgaggaa 5640
atgtgtgctg attcctggag atggcagtct tctaattgta atgggtataa gagtgcggaa 5700
taagaatgga ggccttctca attgagaagg ccttttttaa agaacaaggg tgcctaaaca 5760
ggcacccttg ttagctgtta tttgattttc acg 5793

<210> 4
<211> 29
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 4
ttacatccgc gggtagaggaa agacaggac 29

<210> 5
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 5
tagtgaattc agaaccgggc cacatcc 27

<210> 6
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 6
tgttcccag aatggaggcc ttctcaattg 30

<210> 7
<211> 37
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 7
tggttgatga catctgaggg aggtacaatt gtagctg 37

<210> 8
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 8
ttttcatcga tactagtgtg cacggatcca tctgaaggtc gatacggg

48

<210> 9
<211> 36
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 9
ttgtttgtcg acgcaaagct gttttatgaa ttctcc

36

<210> 10
<211> 39
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 10
ttttggccca gccggccaac aggtcatttt ttaggaggg

39

<210> 11
<211> 39
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 11
ttattggatc cgtgaaaatc aaataacagc taacaaggg

39

<210> 12
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 12

ttttcatcga taacaggtca ttttttagga ggg

33

[illegible]